

FIG.1

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1   GGTCTCTGGAGCGCCCTGGGTTGCCCCGGCCGGTCCCTGCCGCTGACTTGTTGACACTGCCG
61  AGCACTCAGTCCCTCCCGCGCGCCTCCTCCCCGCCCCGCCCCGCGCTCCTCCTCCCTGTÀ
121 ACATGCCATAGTGC GCCTGCGACCACACGGCCGGGGCGCTAGCGTTTCGCCTTCAGCCACC
181 ATGGGGAATGGGATGAACAAGATCCTGCCCGGCCTGTACATCGGCAACTTCAAAGATGCC
    M G N G M N K I L P G L Y I G N F K D A      20
241 AGAGACGCGGAACAATTGAGCAAGAACAAGGTGACACATATTCTGTCTGTCCATGATAGT
    R D A E Q L S K N K V T H I L S V H D S      40
301 GCCAGGCCTATGTTGGAGGGAGTTAAATACCTGTGCATCCCAGCAGCGGATTCAACATCT
    A R P M L E G V K Y L C I P A A D S P S      60
361 CAAACCTGACAAGACATTTCAAAGAAAGTATTAAATTCATTCACGAGTGCCGGCTCCGC
    Q N L T R H F K E S I K F I H E C R L R      80
421 GGTGAGAGCTGCCTTGTA CACTGCCTGGCCGGGGTCTCCAGGAGCGTGACACTGGTGATC
    G E S C L V H C L A G V S R S V T L V I      100
481 GCATACATCATGACCGTCACTGACTTTGGCTGGGAGGATGCCCTGCACACCGTGCGTGCT
    A Y I M T V T D F G W E D A L H T V R A      120
541 GGGAGATCCTGTGCCAACCCCAACGTGGGCTTCCAGAGACAGCTCCAGGAGTTTGAGAAG
    G R S C A N P N V G F Q R Q L Q E F E K      140
601 CATGAGGTCCATCAGTATCGGCAGTGGCTGAAGGAAGAATATGGAGAGAGCCCTTTGCAG
    H E V H Q Y R Q W L K E E Y G E S P L Q      160
661 GATGCAGAAGAAGCCAAAAACATTCTGGGTAAATATAAGGAGCAAGGGCGCACAGAGCCC
    D A E E A K N I L G K Y K E Q G R T E P      180
721 CAGCCCGGCGCCAGGCGGTGGAGCAGTTTTCCGGCACTGGCTCCGCTGACCTACGATAAT
    Q P G A R R W S S F P A L A P L T Y D N      200
781 TATACGACGGAGACCTAACGCAAGCGACCTGCTGCCTTCCTTCCCACTGCTTGTCTTCAG
    Y T T E T * 205
841 TGTGCCCCGGCTGGGCAGGGTGCGGTGGTGGTGGCCGATGAGACAGGAAAGGGAGATAGCC
901 AGGGCGAGGTGGGGCGAGGGCTCTTTCCCCAAGCAACACCGCCAGCCTTGTTCCAGGC
961 CCTTGCACTCCGCCCACCCTACCTGGCTGCACCTGAGCTTGCTGCCCCCGGGGATGTTGC
1021 CCAGTGGCTGTGCACTGCTCTGTGCACGTGCGTGTGTGTGAGTGCACTTGTGTGTGGGTG
1081 ACTAAGTGGATGCATGTGTGTGCCTGTGTGAGTGAGGGTATGTGCACCTAAGTGTGTACA
1141 TGTGTGTATGTTGTGAAAGTGTCTGTGCACATGAATGTTTGTGTGAGTGTGAACTCTTTC
1201 TTACTGCTGGAAGTCACA      1218

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FIG.2

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1 AGCCCGGCGCGGCCATGGGGAGTGGGATGAGCCAGATCCTGCCGGGCCTGTACATTGGCA
M G S G M S Q I L P G L Y I G N 16
61 ACTTCAAAGACGCAAGAGATGCAGAACAGTTGAGCAGGAACAAGGTGACACACATTCTTT
F K D A R D A E Q L S R N K V T H I L S 36
121 CTGTGCACGATACTGCCAGGCCCATGTTGGAGGGAGTTAAATACCTGTGTATTCCAGCGG
V H D T A R P M L E G V K Y L C I P A A 56
181 CAGACACACCATCTCAAACCTGACAAGACATTTCAAAGAAAGCATTAAATTCAATCATG
D T P S Q N L T R H F K E S I K F I H E 76
241 AGTGCCGACTCCAGGGTGAGAGCTGTCTGTACATTGCCTGGCTGGGGTCTCCAGGAGTG
C R L Q G E S C L V H C L A G V S R S V 96
301 TGACATTGGTGATCGCATACATCACGACTGTCACCGACTTTGGCTGGGAAGATGCCTTGC
T L V I A Y I T T V T D F G W E D A L H 116
361 ACACTGTTCTGTCGGGGAGGTCTGTGCCAACCCCAACCTGGGCTTTCAAAGGCAGCCGC
T V R A G R S C A N P N L G F Q R Q P Q 136
421 AGGAGTTTGAGAAACATGAAGTGACACAGTATCGGCAATGGCTGAGAGAAGAGTATGGAG
E F E K H E V H Q Y R Q W L R E E Y G E 156
481 AGAACCTTTGCGGGATGCAGAAAGCCAAAAATATTCTGGGTAAATATAAGAGCAAG
N P L R D A E E A K N I L G K Y K E Q G 176
541 GCGCATGGAGCCCCGGCCTAGCAGCAGGCGGTGGAGCAGCTTCTCAACCCTGCCTCCTC
R M E P R P S S R R W S S F S T L P P L 196
601 TCACCTACAATAACTACACAACAGAGACCTAACAGAGAGAGCTGGTGTCTGCCTTCCTGC
T Y N N Y T T E T * 205
661 TCGGGTCTTCTGGGTTGCCTACCATGTGCTGGTGCCTGGTGTGCTGGCTCCTGCCTC
721 TGAGGACTACGAGAGGAGGTGCGCAGCAAGGTGGAGCACTCAGGGCTCCTTCTCAGAATAC
781 CGCCCTACTCAGGCTTTTTCACCTCTCCCATCTTCGCCCCATCTTTTCTCACCTGAACCT
841 GCCCAACCTGGGATGCTGCCCGGCCACCGTGTACTTCTCGTATGTGTGCAGGCGTGTGGA
901 TGTGCATGTATGTGTCTAAGAGTGTGCATATATACCTACAAATGTATGCATTGTGAACAA
961 GTACACATGTAAATGTGTCTCTGCATGTGGGCACTGAGTGTATGGTGTCTGAAAGTTAT
1021 AAACACCCGCTGCCAGAAGTGCATGGTGCATTGTTCAATCCACATGGAAGTCATTG
1081 AACTTGGCCTCCTGGAAAGCTACTCCACCAAGTACAGCTTATGCCTGTGCTGAGTGAGAG
1141 CTCAGGGTGTGGGCAGCTGGAAACAGTGGTGTTCAGATTCTGAGATGGCACAGAGGAAG
1201 GGACAGGACCCTCCTGAGGAAGAGTGGCATAATCCTAGTGAGTTTTATGTCTGTGGGAAC
1261 AAGGGAGGGGCTTTCTGAGCACTGTCTGGACTTGATAAGTATACTTGCCAGCCGTCAT
1321 GGCCCTGAGTTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT
1381 GATATGGTATGGTGACAGGGTGGACCTGAGACTCAGTAGGCCTATACCAGAGGTCTGGCC
1441 CACTCCTGTCTGCTTTTAAACACTTAGCTCTGGCTTAGCTCTTGTGTCAGGGGTCTCAT
1501 CTCAGGTTTGCATGTACCTGCAGGAAGTGGAAAGAAAGGCAGTTATTAACTCCATAGCC
1561 ATTTGTGATTTAAATGCCTACGCATTCAGTCTGAGCTCACTGTTGTATGCTGTGGATTTGA
1621 CCGCTACCTCATGAAGTTCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
1681 TCCT
1741 CATAGTTGAGAATGTTTGTCTGTGACTATTGTTTTTGAACCAAAGAGAAGAGCATACT
1801 TATGTCATTGAGTGATTTAAATTTGCAGCTTGGCTTCTGTAGGGTTTTCTAGTGAGTCA
1861 AACCTACATTCTGACCATGAGAGTCTTAGTTCAAAGTATGTGGCAGCAGGCACCCCTAG
1921 AAGTTTTGCACAGTCCAGTGTCCAGTCTTTATGCCAATTCAGTTGCTTAAGCATGCAG
1981 GACCATGCAAATGAAAAATACACTCAACCTCTCCCTAAACGTACTGTGACCAGGCATCTC
2041 TGAAGCTTAAGAAACCCCAAGAGCCCGAGGAGCTGGACAGTGGTGGCACACACCTT
2101 TAATCCAGCTTTTGGGAGGCAGAGGCAGGCGGATTCTGAGTTCAAGGCCAGCCTGGTC
2161 TACAGAGTGAGTTCAGGACAGCCAGGGCTACACAGAGAAACCCTGTCCCGAAAAACCAA
2221 AAAAAAAAAAAAAAAAAAAGGAGAAGCCCTGAGGAAGAAAGCAGCAGGCCTCTCTGTGT
2281 GTGTGGAGCTCTCAGGGACCCAGGGAAGGTGTGGTTGCCAGCTCTCTGTGTCAGGCGGT
2341 GCCAAGCAATAGCATGAGTGACGCCTGAGTACCTGAGTATGTGTGACAGTGTATGAACAG
2401 CTGCATACCTTTCCATAGGTTCTCAACTGCTCTCAATTTTGTGGCCAGTAAATGTTCTTTT
2461 TCCACAGCTGCTCCGGGAATTCTGAAGTACTGGGCCTTTCTCAGAAGACTGTAATGTACC
2521 TGAAGTTTCTGAAATATTGCAAAGTTTCAAGCTGGTGTGCTGCCAAAAAGAAAGTGATGTAA
2581 AGTTTTATTTTAAAGATCCAATAGTGATTTGTATACTTGTTTTTTTTCATTTTAAACCA
2641 AATGCATGTATAATCATGTGGGAATATGTTAAGATCTATGGATATTCTGTAGCAAGAGAA
2701 ATATCTTTGCCTTAACCTCACTGCTGTGGTGTTCCTTGGACCTGACCGATGCTCATACA
2761 ATAATCTCAAGAGCCCTGTCTGTTTCGTAAGTAACTAATTAATTAATTAATTAATTAATTA
2821 GGAGGAAGCCTGCACCTGGGAAGTGTGCAATGTGAGCTCTGCCCTCCTGTTAAGTTCTCC
2881 AGCTCTAGACATGTCTCTGGGTGTGTGTTTTATCTACTGGTGTATTCTATATGGTAGAA
2941 TTACCAAAAGCTATTCAAGATTTCTTAATAAAGGGCAAATCCCGGAATCTTTTGNTTTTTA
3001 CCCTGGAAGA 3010

[illegible]

FIG.3(b)

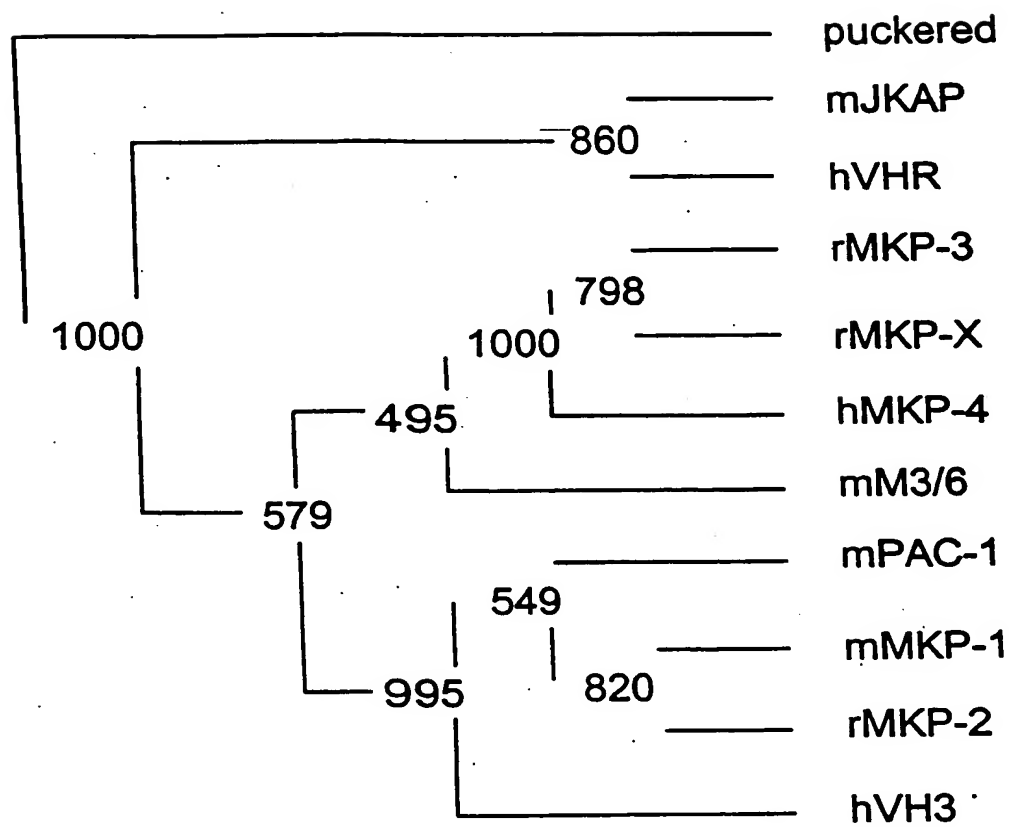


FIG. 3(c)

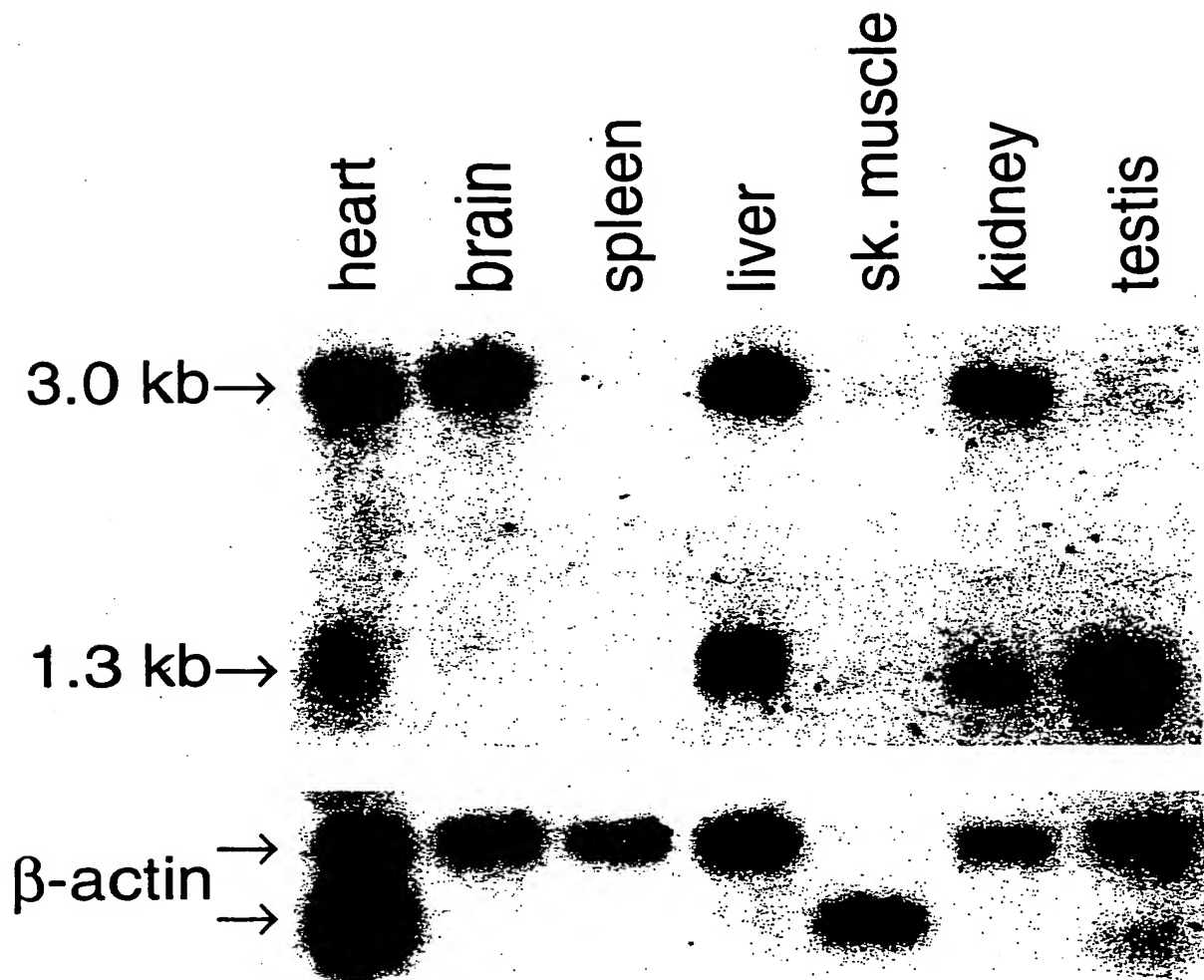
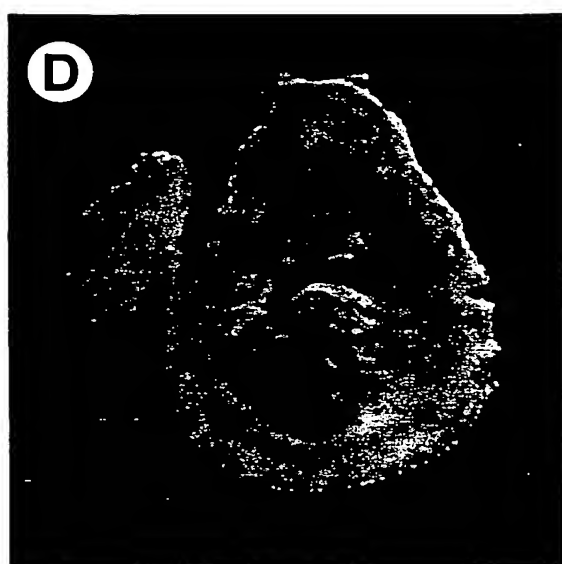
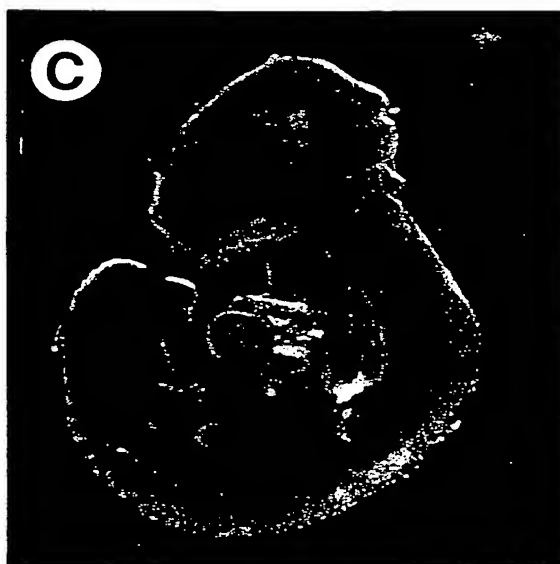
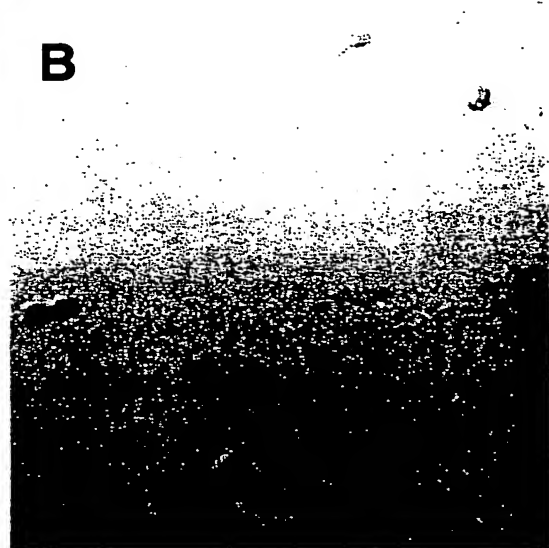
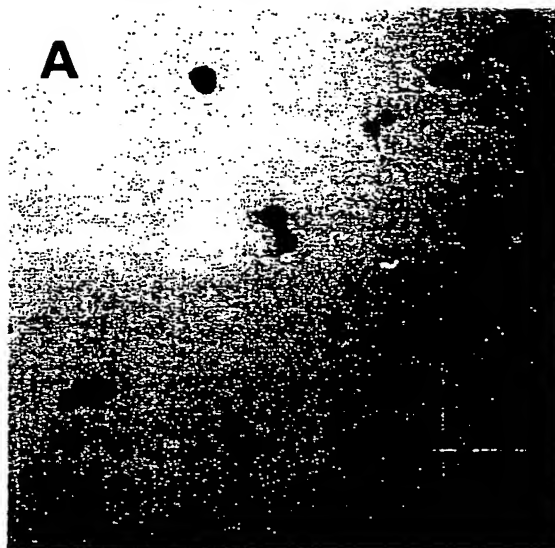
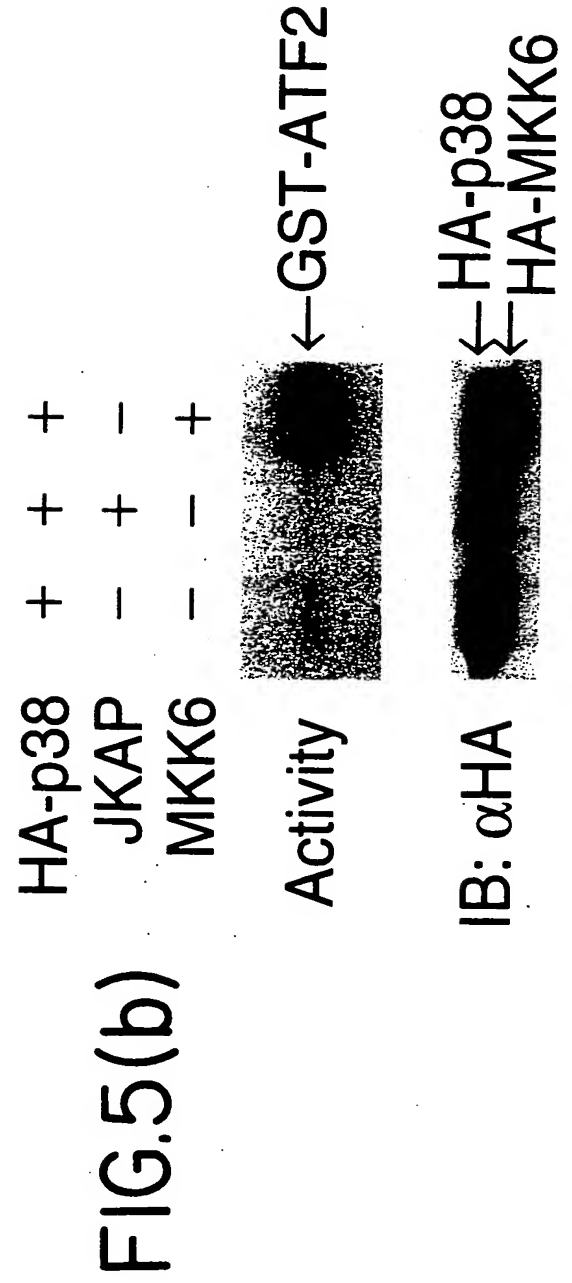
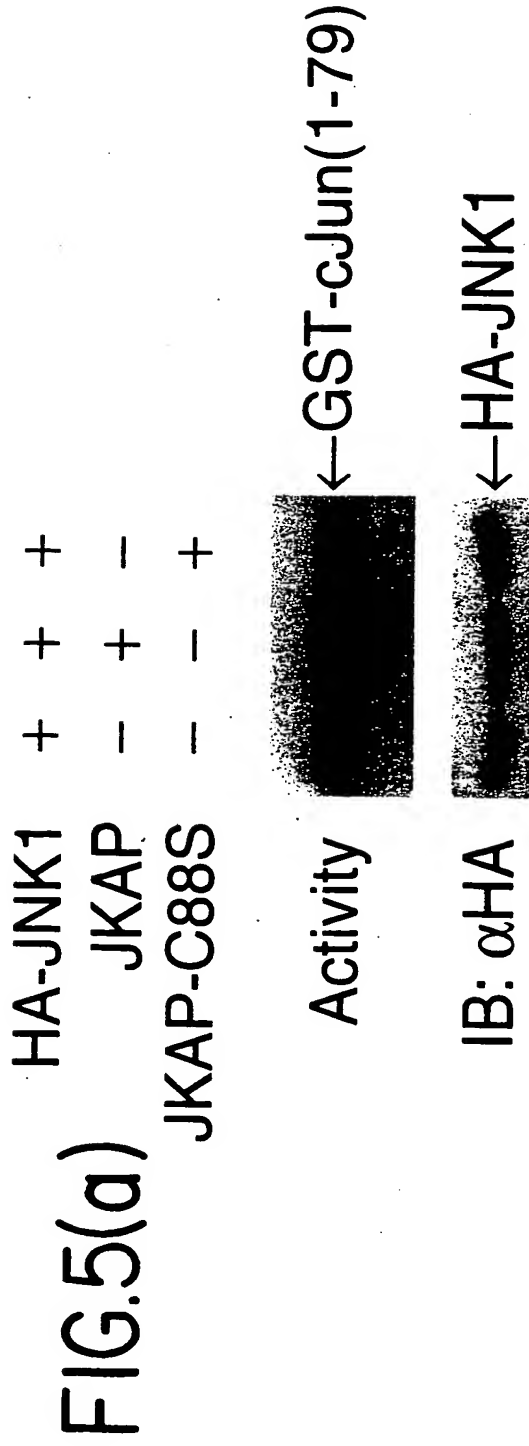


FIG.4

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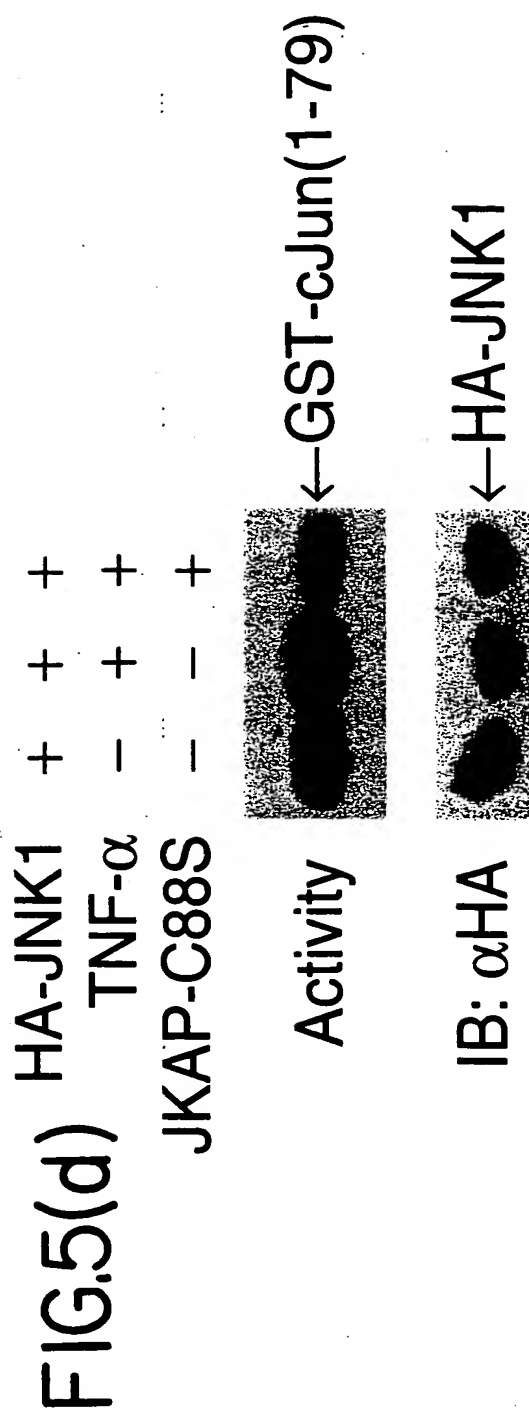
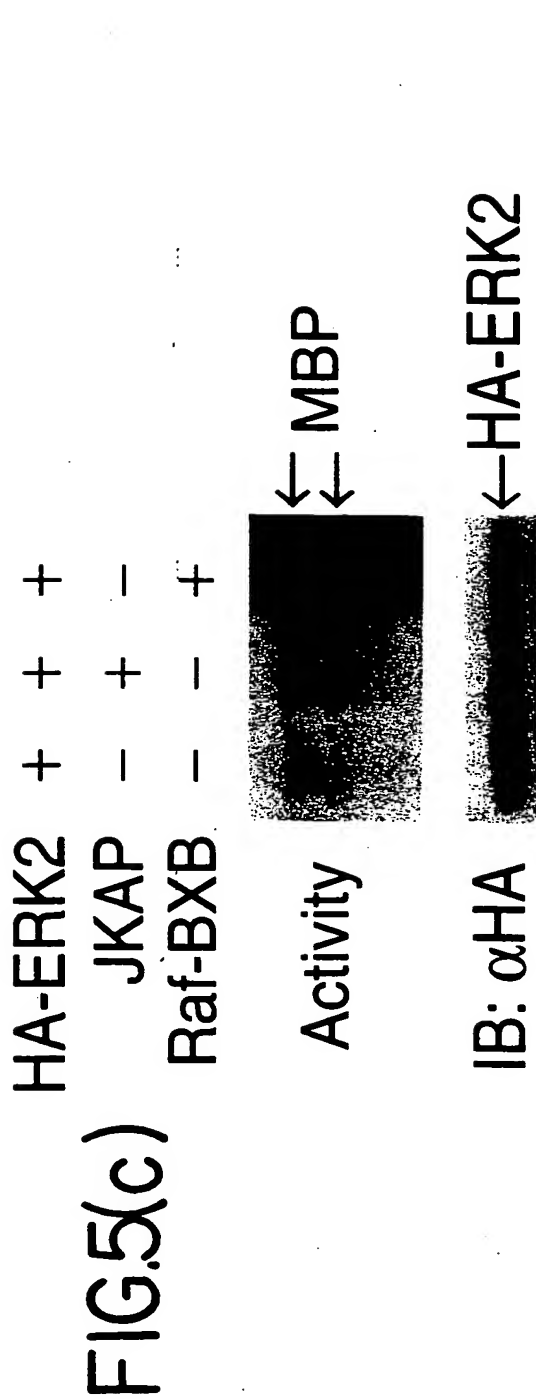
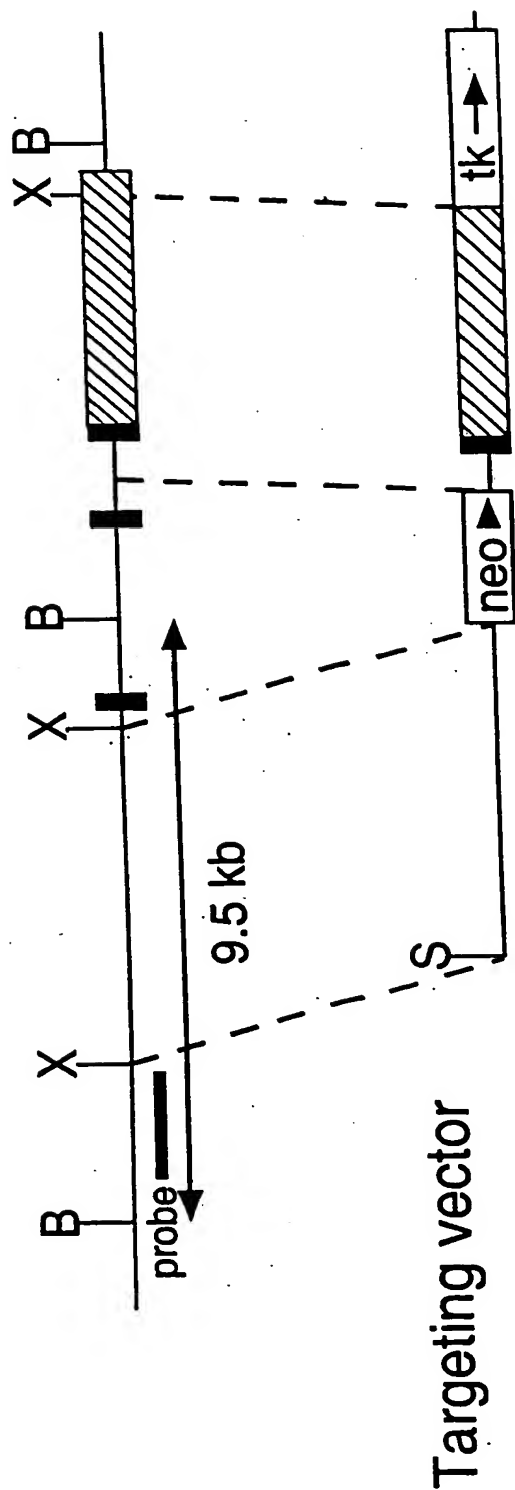


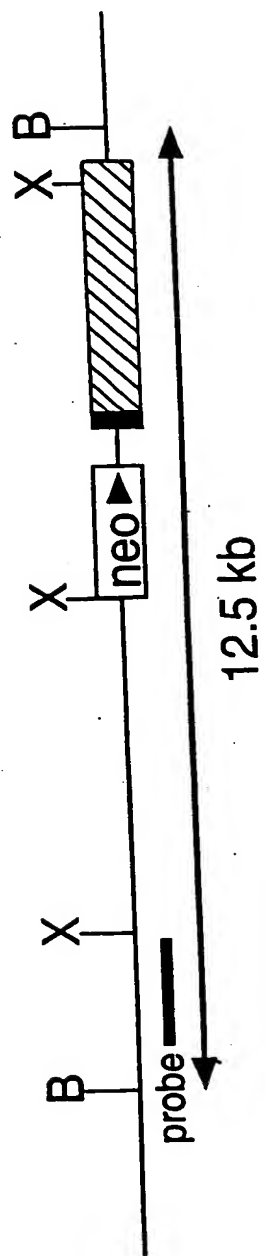
FIG.6(a)

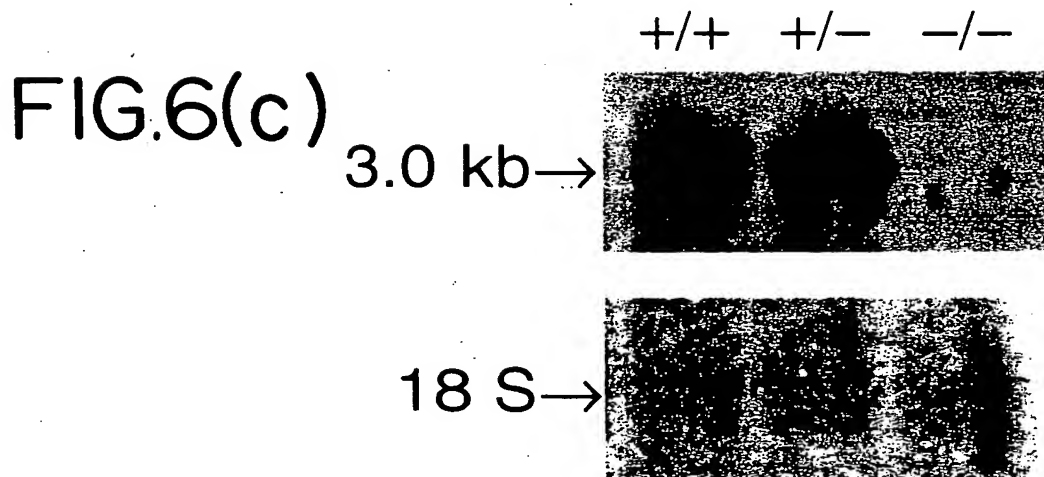
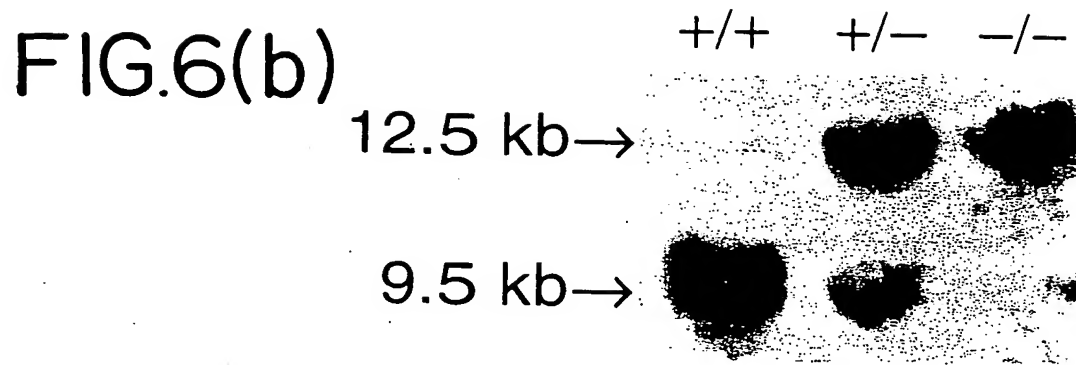
Jkap locus



Homologous
recombination

Mutated *Jkap* locus





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FIG.7(a)

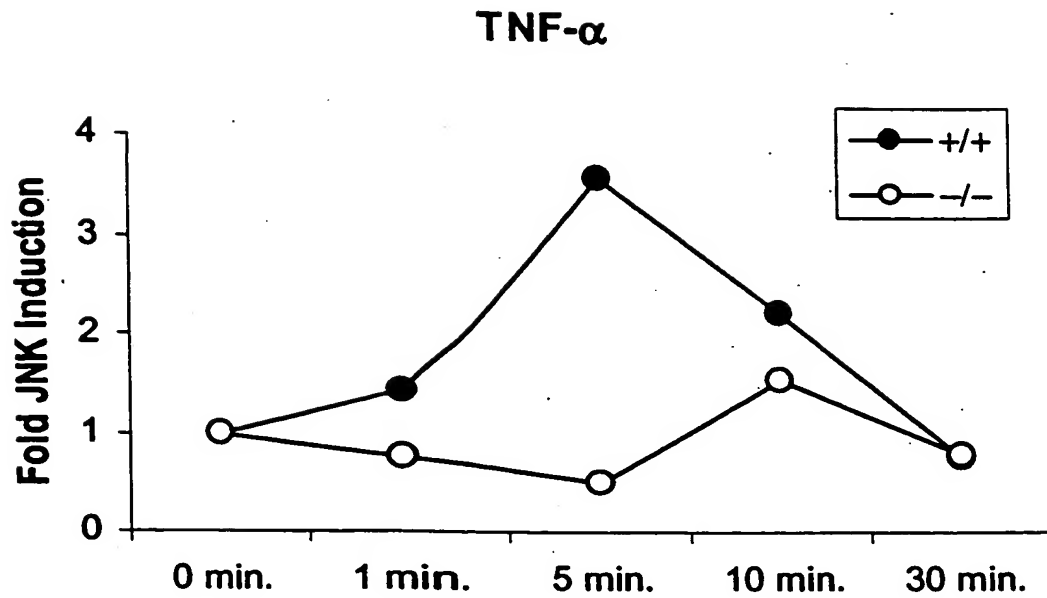


FIG.7(b)

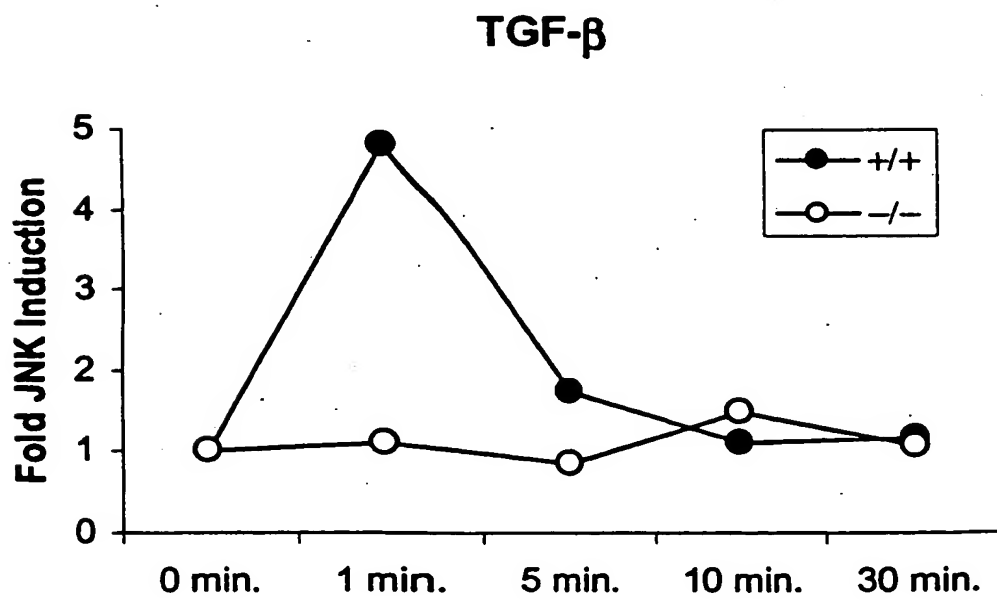


FIG. 7(c)

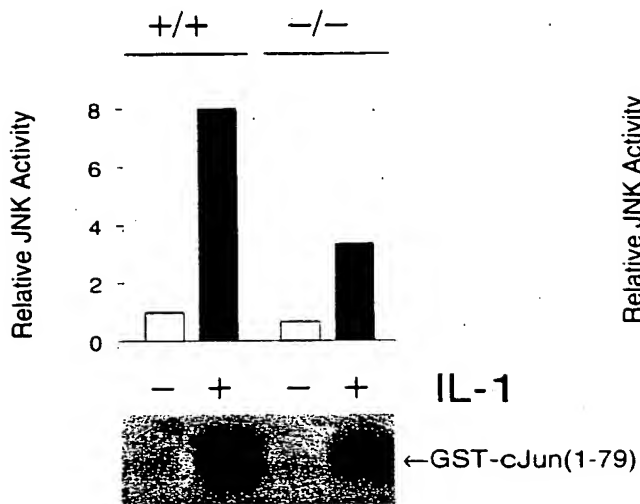


FIG. 7(d)

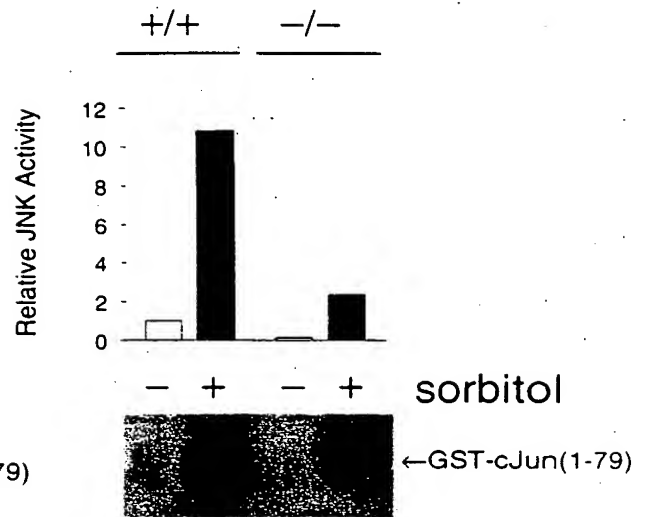


FIG. 7(e)

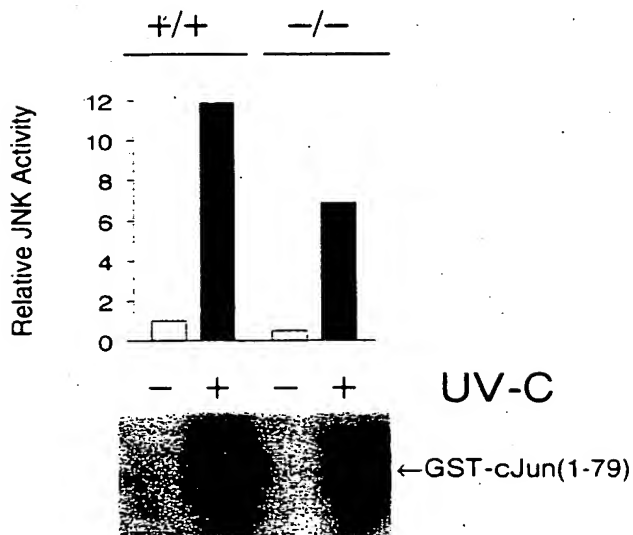


FIG. 7(f)

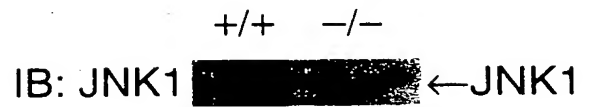


FIG.7(g)

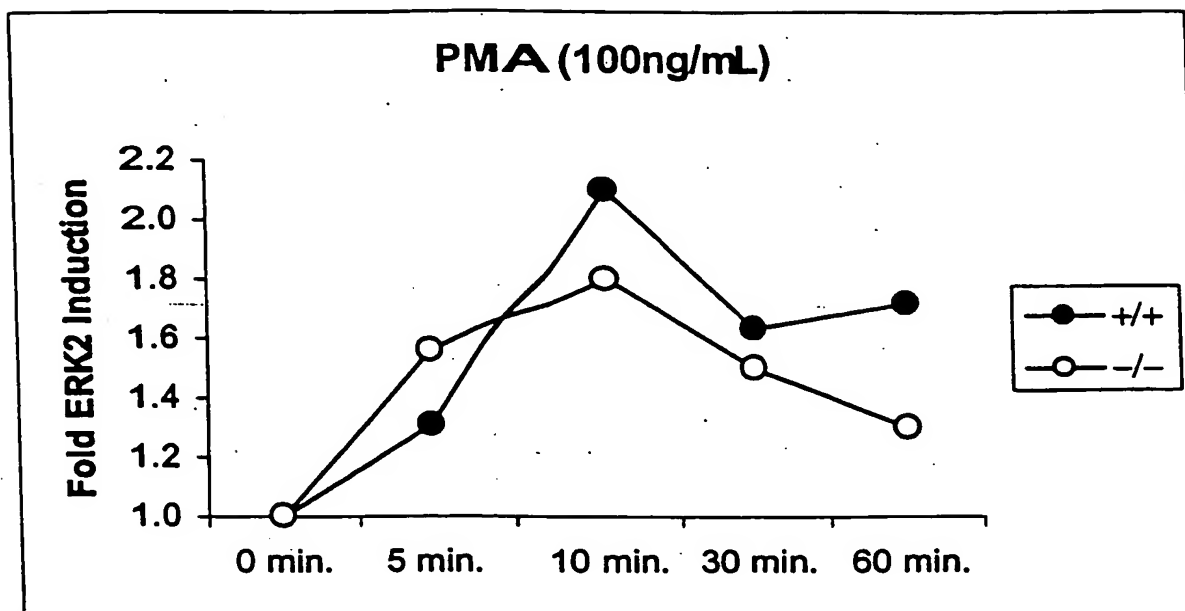


FIG.7(h)

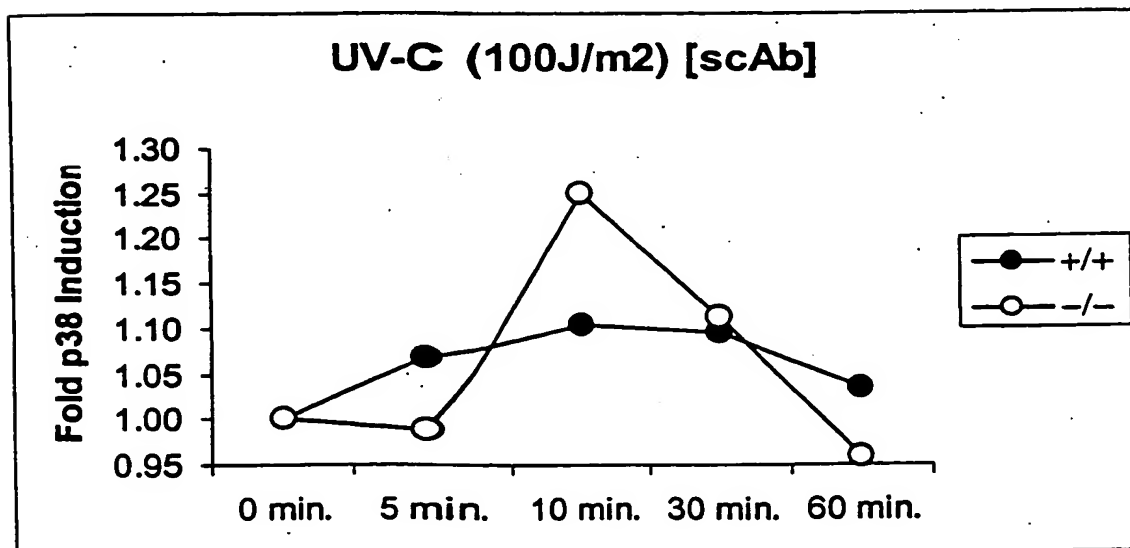
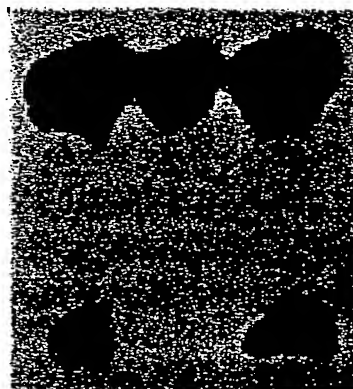


FIG.8(a) ^{14/15}

| | | | |
|------------------|---|---|---|
| HPK1 | — | + | + |
| <i>myc</i> -JKAP | — | — | + |

IP: α HPK1
IB: α *myc*



← *myc*-JKAP

IB: α HPK1



← HPK1

FIG.8(b)

| | | | |
|---------|---|---|---|
| JKAP | — | — | + |
| HPK-1 | — | + | + |
| HA-JNK1 | + | + | + |

Activity



← GST-cJun(1-79)

FIG. 8(c)

